

Listing of Claims:

Please cancel claims 1-18 and add new claims 19-47 as indicated below.

1-18. (Cancelled)

19. (New) A method for automatically determining whether a sample liquid to be tested in an optical measuring instrument is a test sample or a control sample; comprising:

(a) providing an optical measuring instrument effective for measuring sample liquids for an analyte of interest, wherein each of said sample liquids may be a test sample or a control sample;

(b) providing one or more control samples containing a known concentration of said analyte of interest, wherein each of said control samples has been provided with a special property that is not present in any of said test samples;

(c) using said optical measuring instrument to measure one of said sample liquids for the analyte of interest, wherein the optical measurement additionally evaluates said special property; and

(d) automatically determining whether the measured sample liquid is a control sample or a test sample by causing the optical measuring instrument to identify the results of the evaluation of said special property as being consistent with either a control sample or a test sample.

20. (New) The method of claim 19 wherein said special property is an optical property.

21. (New) The method of claim 19 wherein the optical measuring instrument comprises a photometer.

22. (New) The method of claim 21 wherein said using said optical measuring instrument comprises using the photometer to measure absorption or remission in the IR range.

23. (New) A method according to claim 19 wherein said special optical property is provided by providing a dye in the control sample.

24. (New) A method according to claim 23 wherein the dye is an IR dye which does not have a substantial absorption in the wavelength range in which the measurement signal for the analyte of interest is detected.

25. (New) A method according to claim 23 wherein the dye is a member selected from the group consisting of metal complexes of quinolinequinones, nickel dithiolene dyes, nickel tetramine dyes, quinone dyes, phthalocyanine dyes, naphthocyanine dyes, and azo dyes.

26. (New) A method according to claim 23 wherein the dye is (2-[2-[2-chloro-3-[[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1-cyclopentene-1-yl]ethenyl]-1,1-dimethyl-3-(4-sulfobutyl)-1H-benz[e]indolium, internal salt, sodium salt.

27. (New) A method according to claim 19 wherein said special property is a higher decrease in remission in comparison to the decrease in remission typically observed in a test sample.

28. (New) The method of claim 19 wherein said special property is a flow property.
29. (New) The method of claim 19 wherein said special property is a wetting property.
30. (New) The method of claim 19 wherein said special property is the time required for the sample liquid to reach its end value.
31. (New) The method of claim 19 wherein said special property is the stability of the end value.
32. (New) A method according to claim 19 wherein said optical measuring instrument evaluates two or more properties in the measured sample liquid, wherein said two or more properties, in combination, have been identified as being indicative of either a control sample or a test sample; and further wherein said automatically determining step includes causing the measuring instrument to identify the results of the evaluation of said two or more properties as being consistent with either a control sample or a test sample.
33. (New) A method according to claim 32 wherein one of said two or more properties is an optical property.
34. (New) A method according to claim 32 wherein one of said two or more properties is a flow property.
35. (New) A method according to claim 32 wherein one of said two or more properties is a wetting property.
36. (New) A method according to claim 32 wherein one of said two or more properties is the time required for the sample liquid to reach its end value.
37. (New) A method according to claim 32 wherein one of said two or more properties is the stability of the end value.
38. (New) A method according to claim 32 wherein one of said two or more properties is the time required for the sample liquid to reach its end value, and a second of said two or more properties is the constancy of that end value; and further wherein said automatically determining step includes causing the measuring instrument to identify the results of the measurement of the time required for the sample liquid to reach its end value and the constancy of that end value as being consistent with either a control sample or a test sample.
39. (New) A method according to claim 38 wherein one of said two or more properties is the time required for the sample liquid to reach a stable remission value, and a second of said two or more properties is the stability of its remission value at the end of the measuring period, and wherein said automatically determining step includes causing the measuring instrument to identify the results of the measurement of the time required for the sample liquid to reach a stable remission value and the stability of its remission value at the end of the measuring period as being consistent with either a control sample or a test sample.

40. (New) A method for automatically determining whether a sample liquid to be tested in an electrochemical measuring instrument is a test sample or a control sample; comprising:

(a) providing an electrochemical measuring instrument effective for measuring sample liquids for an analyte of interest, wherein each of said sample liquids may be a test sample or a control sample;

(b) providing one or more control samples containing a known concentration of said analyte of interest, wherein each of said control samples has been provided with an electrolyte which increases the conductivity of the control sample in comparison to the conductivity the body fluid to be tested in a test sample;

(c) using said electrochemical measuring instrument to measure one of said sample liquids for the analyte of interest, wherein the measurement additionally measures the conductivity of the sample liquid; and

(d) automatically determining whether the measured sample liquid is a control sample or a test sample by causing the measuring instrument to identify the results of the measurement of the conductivity of the sample as being consistent with either a control sample or a test sample.

41. (New) A method for automatically determining whether a sample liquid to be tested in an electrochemical measurement device is a test sample or a control sample; comprising:

(a) providing an electrochemical measuring instrument effective for measuring sample liquids for an analyte of interest, wherein each of said sample liquids may be a test sample or a control sample;

(b) providing one or more control samples containing a known concentration of said analyte of interest;

(c) using said electrochemical measuring instrument to measure one of said sample liquids for the analyte of interest, wherein said measurement additionally includes measuring the time required for the sample liquid to reach its end value and the constancy of that end value; and

(d) automatically determining whether the measured sample liquid is a control sample or a test sample by causing the measuring instrument to identify the results of the measurement of the time required for the sample liquid to reach its end value and the constancy of that end value as being consistent with either a control sample or a test sample.

42. (New) A method for automatically determining whether a sample liquid to be tested in a measuring instrument is a test sample or a control sample; comprising:

(a) providing a measuring instrument effective for measuring sample liquids for an analyte of interest, wherein each of said sample liquids may be a test sample or a control sample;

(b) providing one or more control samples containing a known concentration of said analyte of interest, wherein each of said control samples has been provided with a flow characteristic that is not present in any of said test samples;

(c) using said measuring instrument to measure one of said sample liquids for the analyte of interest, wherein the measurement additionally evaluates said flow characteristic; and

(d) automatically determining whether the measured sample liquid is a control sample or a test sample by causing the measuring instrument to identify the results of the evaluation of said flow characteristic as being consistent with either a control sample or a test sample.

43. (New) A method according to claim 42 wherein said measuring instrument evaluates a second property in addition to said flow characteristic, and wherein said automatically determining step comprises determining whether the measured sample liquid is a control sample or a test sample by causing the measuring instrument to identify the results of both the evaluation of the flow characteristic and the evaluation of the second property, in combination, as being consistent with either a control sample or a test sample.

44. (New) A method according to claim 43 wherein said second property is the stability of the end value of the concentration of the analyte of interest.

45. (New) A method for automatically determining whether a sample liquid to be tested in a measurement device is a test sample or a control sample; comprising:

(a) providing a measuring instrument effective for measuring sample liquids for an analyte of interest, wherein each of said sample liquids may be a test sample or a control sample;

(b) providing one or more control samples containing a known concentration of said analyte of interest;

(c) using said measuring instrument to measure one of said sample liquids for the analyte of interest, wherein said measurement additionally includes evaluating a wetting property in the measured sample liquid; and

(d) automatically determining whether the measured sample liquid is a control sample or a test sample by causing the measuring instrument to identify the results of the evaluation of said wetting property as being consistent with either a control sample or a test sample.

46. (New) A method according to claim 45 wherein said measuring instrument evaluates a second property in addition to said wetting property, and wherein said automatically determining step comprises determining whether the measured sample liquid is a control sample or a test sample by causing the measuring instrument to identify the results of both the evaluation of the wetting property and the evaluation of the second property, in combination, as being consistent with either a control sample or a test sample.

47. (New) A method according to claim 46 wherein said second property is the stability of the end value of the concentration of the analyte of interest.